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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/886,395	06/22/2001	Christophe Dauga	P 0281180 B00/1600US	4258

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EXAMINER	
SHAW, SHAWNA JEANNINE	

ART UNIT	PAPER NUMBER
3737	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/886,395	DAUGA, CHRISTOPHE
	Examiner	Art Unit
	Shawna J. Shaw	3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 3/29/2004, 4/9/2004.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 and 15-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 and 15-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/9/04 have been fully considered but they are not persuasive. Regarding claims 1, 15 and 16, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a processing unit "configured and arranged" to calculate brightness and intensity) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, in response to applicant's argument that the prior art does not disclose a processing unit "configured and arranged" to calculate brightness and intensity, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

2. Applicant's arguments with respect to claims 9, 10 and 24-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Interpretation/Definitions

3. The examiner notes that applicant equates the terms "diffuse reflection" and "colour" (i.e., intensity), as well as "specular reflection" and "brightness." See specification page 7 lines 19-25. The examiner also notes that applicant considers solar spectrum light to be white light (page 8 lines 5-7).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Alfano et al.

Alfano et al. teach an apparatus for examining a surface including: a polarization analyzer (21), a digital acquisition device (19) and a processing unit "configured and arranged" to calculate brightness/specular and color/diffuse information (23, cp. page 10 lines 21-25 of the present specification).

5. Claims 1-3, 5-10, 15-18 and 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolff et al. '811 of record.

Wolff et al. teaches a non-contact apparatus for examining a surface including a source of polarized light (16 and light source) substantially the same as the solar spectrum; a polarization analyzer (24, 22) comprising a means for rotating, or electrooptic crystals, placed in the path of the reflected light; and a CCD camera/processing unit (20) downstream of the polarization analyzer capable of processing specularly and diffusely reflected light. See figure 6, col. 4 lines 44-58. The examiner further notes that Wolff et al. incorporates by reference CCD processing details of 5,557,324 in col. 11 lines 50-51.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff et al. '811 of record.

Regarding claims 4 and 19, Wolff et al. differs from the claimed invention in that white light is not addressed explicitly, however at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use a white light source because Applicant has not disclosed that a white light source provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either a

light source substantially the same as the solar spectrum or a white light source because both perform the same function of enabling the surface of an object to be examined with respect to brightness and intensity.

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff et al. '811 of record in view of Doan of record.

Regarding claims 11 and 12, Wolff et al. differs from the claimed invention in that polychromatic digital images are not addressed. Doan provides the general teaching of obtaining polychromatic (i.e., color) images to inspect circuit boards for contamination or exposed copper surfaces (col. 3 lines 61-67). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify Wolff et al. to obtain polychromatic digital images as taught by Doan to provide an improved means for circuit board inspection and for the determination of metal type and placement (see Wolff et al., col. 1 lines 24-29).

8. Claims 9, 10, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiratori et al. of record in view of Nanna et al.

Regarding claims 9, 10, 24 and 25, Shiratori et al. now differ from the claimed invention in that the step of analyzing both crossed and parallel polarization is not addressed. In the same field of endeavor, Nanna et al. disclose obtaining both specularly and diffusely reflected light with polarizing filters (20 and 22) for subsequent analysis/post-processing by image processor (26). See also col. 1 lines 8-12. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to obtain both crossed

and parallel (i.e., diffusely and specularly) polarized light for post processing analysis as taught by Nanna et al. instead of only one initial filtered state as taught by Shiratori et al. to provide more accurate measurement of an object's gloss level and which is further independent of the object's shape, texture or color.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawna J. Shaw whose telephone number is (703) 308-2985. The examiner can normally be reached on 6:45 a.m. - 3:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (703) 308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawna J. Shaw
Primary Examiner
Art Unit: 3737
09/30/2004